Plebejus idas (Northern Blue)

Report Date: January 13, 2016

Priority 2 Species of Greatest Conservation Need (SGCN)

Class: Insecta (Insects)

Order: Lepidoptera (Butterflies, Skippers, And Moths)
Family: Lycaenidae (Gossamer-winged Butterflies)

General comments:

a previously overlooked native subspecies; only 1 EO in extreme northwest Maine; rare boreal habitat; few additional populations expected

Species Conservation Range Maps for Northern Blue:

Town Map: <u>Plebejus idas Towns.pdf</u>
Subwatershed Map: <u>Plebejus idas HUC12.pdf</u>

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation: NA

State Special Concern or NMFS Species of Concern:

Plebejus idas is listed as a species of Special Concern in Maine.

Recent Significant Declines: NA

Regional Endemic: NA

High Regional Conservation Priority: NA High Climate Change Vulnerability:

Vulnerability: 3, Confidence: Medium, Reviewers: Decided in Workshop (W)

Understudied rare taxa:

Recently documented or poorly surveyed rare species for which risk of extirpation is potentially high (e.g. few known occurrences) but insufficient data exist to conclusively assess distribution and status. *criteria only qualifies for Priority 3 level SGCN*

Notes: a previously overlooked native subspecies; only 1 EO in extreme northwest Maine; rare boreal habitat; few additional populations expected

Historical: NA

Culturally Significant: NA

Habitats Assigned to Northern Blue:

Formation Name Boreal Upland Forest

Macrogroup Name Boreal Upland Forest

Habitat System Name: Acadian Low Elevation Spruce-Fir-Hardwood Forest **Primary Habitat** Notes: dry upland black spruce woodlands where host plants (Dwarf Billberry, Labrador Tea, Sheep Laurel) present

Stressors Assigned to Northern Blue:

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity Actionability: Highly actionable

Notes: Lack of comprehensive survey effort to identify additional occurrences and determine species status

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IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Agricultural and Forestry Effluents

Severity: Moderate Severity Actionability: Highly actionable

Notes: Nontarget species impacts from use of aerial pesticides -- e.g., Spruce Budworm control

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: Moderate Severity **Actionability:** Actionable with difficulty **Notes:** Climate change; a northern species at the extreme southern edge of its range

Species Level Conservation Actions Assigned to Northern Blue:

*Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

Conservation Action Category: Research Biological Priority: high Type: new

Prepare a statewide atlas and conservation assessment.

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Action Category: Species Management Biological Priority: critical Type: new

Prepare occurrence maps and pesticide spray consultation guidelines for rare Lepidoptera and distribute to strategic partners including Maine Bureau of Pesticides Control.

Stressor(s) Addressed By This Conservation Action

Agricultural and Forestry Effluents

Guild Level Conservation Actions:

This Species is currently not attributed to a guild.

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.